

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P201250

Luminaire Tested: **4LBLED-LD4-9-SYMF-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P201250
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P28138)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4LBLED-LD4-9-SYMF-UNV-L850-CD1-U
Description: 4 ft. Low Bay Linear, 9000 lm, Frst Sym lens, 5K
Light Source: (392) 5000K CCT, 80 CRI LEDS
2UT217098A8504C
Ballast/Driver: OSRAM
(OTi85W01480CC)

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10044.3 lumens
Efficiency: N/A
Efficacy: 150.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.99 / 1.87
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.21')
CIE Type: Semi-Direct

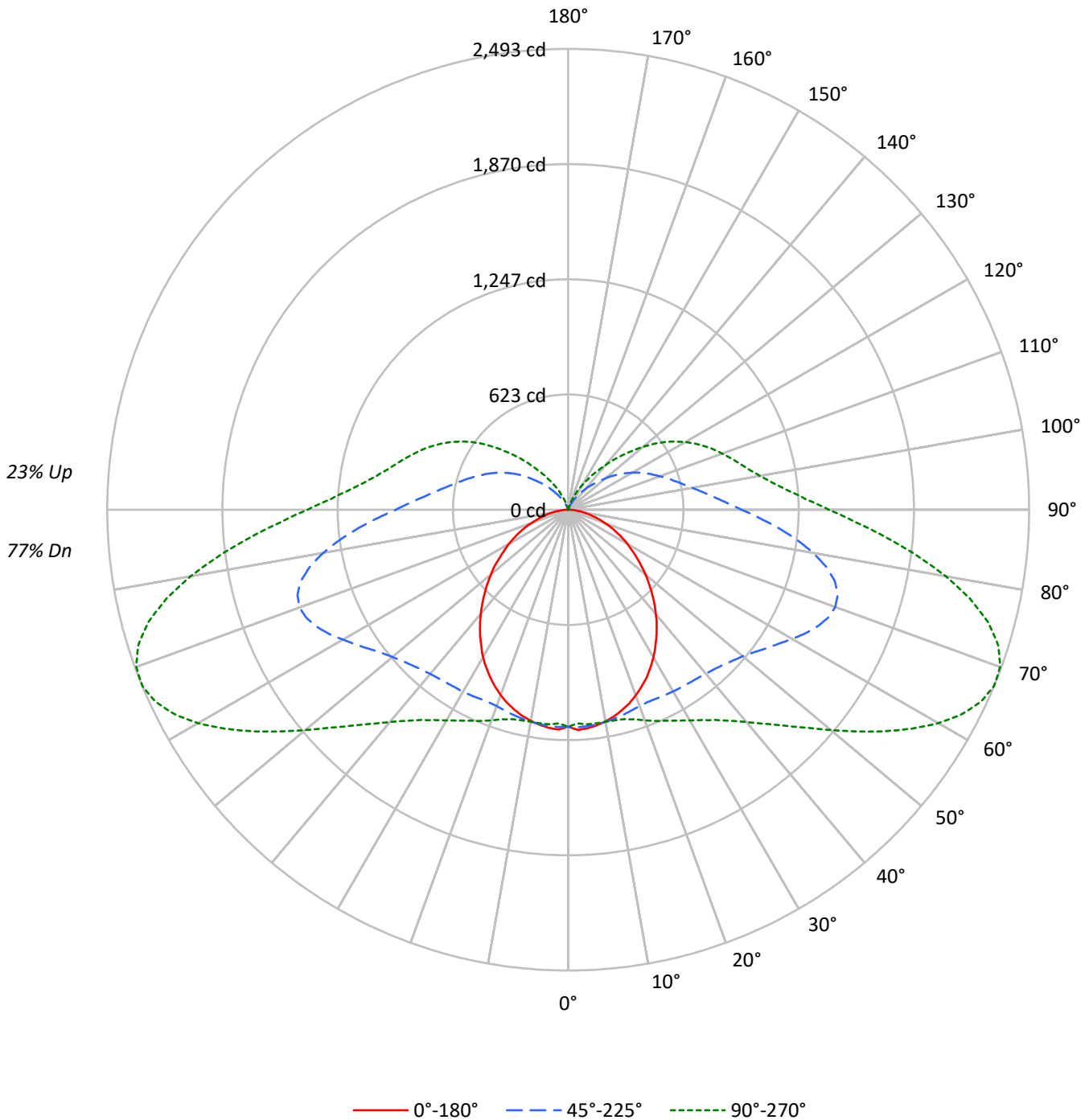
Input Watts (W): 66.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P201250

CATALOG NUMBER: 4LBLED-LD4-9-SYMF-UNV-L850-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P201250

CATALOG NUMBER: 4LBLED-LD4-9-SYMF-UNV-L850-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | |
| RC | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 108 | 98 | 98 | 98 | 89 | 89 | 89 | 81 | 81 | 81 | 77 |
| 1 | 98 | 91 | 84 | 78 | 92 | 86 | 80 | 75 | 77 | 73 | 68 | 69 | 65 | 62 | 62 | 59 | 56 | 52 |
| 2 | 86 | 75 | 66 | 59 | 81 | 71 | 63 | 56 | 64 | 57 | 51 | 57 | 51 | 47 | 50 | 46 | 42 | 38 |
| 3 | 77 | 64 | 54 | 46 | 72 | 61 | 51 | 44 | 54 | 46 | 40 | 48 | 42 | 37 | 43 | 37 | 33 | 29 |
| 4 | 70 | 55 | 45 | 37 | 65 | 52 | 43 | 36 | 47 | 39 | 32 | 42 | 35 | 30 | 37 | 31 | 27 | 23 |
| 5 | 63 | 49 | 38 | 31 | 59 | 46 | 37 | 29 | 41 | 33 | 27 | 37 | 30 | 25 | 32 | 27 | 22 | 19 |
| 6 | 58 | 43 | 33 | 26 | 55 | 41 | 32 | 25 | 37 | 29 | 23 | 33 | 26 | 21 | 29 | 23 | 19 | 16 |
| 7 | 54 | 39 | 29 | 22 | 50 | 37 | 28 | 21 | 33 | 25 | 20 | 30 | 23 | 18 | 26 | 21 | 16 | 14 |
| 8 | 50 | 35 | 26 | 19 | 47 | 33 | 25 | 19 | 30 | 22 | 17 | 27 | 20 | 16 | 24 | 18 | 14 | 12 |
| 9 | 46 | 32 | 23 | 17 | 44 | 30 | 22 | 16 | 27 | 20 | 15 | 25 | 18 | 14 | 22 | 17 | 13 | 10 |
| 10 | 43 | 29 | 21 | 15 | 41 | 28 | 20 | 15 | 25 | 18 | 14 | 23 | 17 | 12 | 20 | 15 | 11 | 9 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|-------|-------|-------|
| 0° | 18909 | 18909 | 18909 |
| 5° | 19115 | 16991 | 19074 |
| 10° | 18847 | 15628 | 18804 |
| 15° | 18465 | 14678 | 18437 |
| 20° | 17984 | 14309 | 17955 |
| 25° | 17409 | 14167 | 17334 |
| 30° | 16653 | 14242 | 16637 |
| 35° | 15797 | 14589 | 15765 |
| 40° | 14885 | 15420 | 14816 |
| 45° | 13892 | 16755 | 13855 |
| 50° | 12884 | 18708 | 12844 |
| 55° | 11865 | 21124 | 11841 |
| 60° | 10942 | 23582 | 10968 |
| 65° | 9917 | 25563 | 9948 |
| 70° | 8826 | 26485 | 8826 |
| 75° | 7513 | 25916 | 7472 |
| 80° | 6048 | 23848 | 5991 |
| 85° | 4151 | 20945 | 3954 |



TEST NUMBER: P201250

CATALOG NUMBER: 4LBLED-LD4-9-SYMF-UNV-L850-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 111.4 | 1.1 |
| 10°-20° | 324.1 | 3.2 |
| 20°-30° | 520.8 | 5.2 |
| 30°-40° | 705.3 | 7.0 |
| 40°-50° | 906.0 | 9.0 |
| 50°-60° | 1165.7 | 11.6 |
| 60°-70° | 1426.1 | 14.2 |
| 70°-80° | 1441.7 | 14.4 |
| 80°-90° | 1114.9 | 11.1 |
| 90°-100° | 774.6 | 7.7 |
| 100°-110° | 578.5 | 5.8 |
| 110°-120° | 433.6 | 4.3 |
| 120°-130° | 292.0 | 2.9 |
| 130°-140° | 160.1 | 1.6 |
| 140°-150° | 68.3 | 0.7 |
| 150°-160° | 19.5 | 0.2 |
| 160°-170° | 1.7 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 956.3 | 9.5 |
| 0°-40° | 1661.6 | 16.5 |
| 0°-60° | 3733.3 | 37.2 |
| 0°-90° | 7716.0 | 76.8 |
| 90°-120° | 1786.8 | 17.8 |
| 90°-150° | 2307.1 | 23.0 |
| 90°-180° | 2328.0 | 23.2 |
| 0°-180° | 10044.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|------|------|------|------|------|------|
| 0° | 1174 | 1174 | 1174 | 1174 | 1174 | |
| 5° | 1187 | 1176 | 1165 | 1174 | 1185 | 112 |
| 15° | 1122 | 1149 | 1174 | 1149 | 1121 | 316 |
| 25° | 1003 | 1127 | 1260 | 1128 | 999 | 461 |
| 35° | 832 | 1143 | 1388 | 1144 | 831 | 520 |
| 45° | 641 | 1186 | 1651 | 1191 | 640 | 495 |
| 55° | 454 | 1307 | 2089 | 1313 | 453 | 406 |
| 65° | 289 | 1490 | 2461 | 1499 | 290 | 287 |
| 75° | 144 | 1492 | 2351 | 1498 | 143 | 154 |
| 85° | 36 | 1141 | 1726 | 1138 | 34 | 39 |
| 90° | 1 | 937 | 1410 | 932 | 0 | 2 |
| 95° | 1 | 791 | 1192 | 787 | 0 | 1 |
| 105° | 1 | 598 | 961 | 598 | 0 | 1 |
| 115° | 1 | 465 | 814 | 465 | 0 | 1 |
| 125° | 1 | 333 | 638 | 332 | 0 | 1 |
| 135° | 2 | 201 | 419 | 199 | 0 | 1 |
| 145° | 2 | 102 | 230 | 98 | 0 | 1 |
| 155° | 2 | 32 | 96 | 31 | 0 | 1 |
| 165° | 2 | 2 | 9 | 4 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P201250

CATALOG NUMBER: 4LBLED-LD4-9-SYMF-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 |
| 2.5° | 1192.2 | 1191.4 | 1186.3 | 1178.6 | 1175.2 | 1174.3 | 1173.5 | 1170.1 | 1169.2 | 1170.9 | 1177.7 |
| 5° | 1187.1 | 1186.3 | 1181.1 | 1173.5 | 1170.9 | 1170.1 | 1169.2 | 1166.6 | 1166.6 | 1169.2 | 1176.0 |
| 7.5° | 1176.9 | 1176.0 | 1170.9 | 1164.9 | 1162.4 | 1161.5 | 1161.5 | 1159.8 | 1159.8 | 1164.1 | 1171.8 |
| 10° | 1162.4 | 1161.5 | 1157.3 | 1152.1 | 1150.4 | 1150.4 | 1150.4 | 1149.6 | 1151.3 | 1156.4 | 1164.9 |
| 12.5° | 1145.3 | 1143.6 | 1140.2 | 1135.9 | 1135.9 | 1135.9 | 1136.8 | 1136.8 | 1139.4 | 1147.9 | 1158.1 |
| 15° | 1122.3 | 1123.2 | 1119.7 | 1116.3 | 1118.0 | 1118.9 | 1120.6 | 1122.3 | 1126.6 | 1136.8 | 1148.7 |
| 17.5° | 1098.4 | 1098.4 | 1095.9 | 1094.2 | 1097.6 | 1099.3 | 1101.8 | 1104.4 | 1112.1 | 1124.9 | 1138.5 |
| 20° | 1068.6 | 1069.4 | 1068.6 | 1069.4 | 1073.7 | 1076.2 | 1079.7 | 1085.6 | 1095.9 | 1113.8 | 1130.0 |
| 22.5° | 1036.2 | 1037.9 | 1037.9 | 1041.3 | 1048.1 | 1052.4 | 1056.6 | 1065.2 | 1079.7 | 1102.7 | 1125.7 |
| 25° | 1002.9 | 1002.1 | 1006.3 | 1012.3 | 1019.1 | 1025.1 | 1030.2 | 1043.0 | 1064.3 | 1095.0 | 1127.4 |
| 27.5° | 962.8 | 964.5 | 970.5 | 979.0 | 989.3 | 996.9 | 1004.6 | 1022.5 | 1053.2 | 1094.2 | 1131.7 |
| 30° | 921.9 | 924.4 | 932.1 | 944.1 | 958.6 | 968.8 | 977.3 | 1005.5 | 1047.3 | 1094.2 | 1135.1 |
| 32.5° | 877.5 | 881.8 | 892.0 | 907.4 | 927.9 | 939.8 | 953.4 | 991.0 | 1042.1 | 1092.5 | 1138.5 |
| 35° | 832.3 | 837.5 | 851.1 | 869.9 | 893.7 | 908.2 | 929.6 | 979.9 | 1035.3 | 1090.7 | 1142.8 |
| 37.5° | 786.3 | 792.3 | 807.6 | 831.5 | 862.2 | 884.4 | 909.9 | 967.9 | 1030.2 | 1090.7 | 1148.7 |
| 40° | 738.5 | 745.4 | 765.0 | 792.3 | 831.5 | 860.5 | 891.2 | 956.0 | 1025.1 | 1091.6 | 1158.1 |
| 42.5° | 689.9 | 697.6 | 721.5 | 753.9 | 805.1 | 839.2 | 873.3 | 945.8 | 1021.7 | 1095.9 | 1170.1 |
| 45° | 641.3 | 651.5 | 678.0 | 717.2 | 781.2 | 817.0 | 856.2 | 936.4 | 1020.0 | 1103.5 | 1186.3 |
| 47.5° | 592.7 | 604.6 | 635.3 | 682.2 | 756.4 | 799.1 | 840.0 | 928.7 | 1021.7 | 1113.8 | 1207.6 |
| 50° | 545.8 | 559.4 | 593.6 | 650.7 | 733.4 | 779.5 | 824.7 | 923.6 | 1025.1 | 1129.1 | 1233.2 |
| 52.5° | 498.0 | 516.0 | 553.5 | 622.6 | 712.9 | 761.6 | 811.9 | 920.2 | 1031.9 | 1149.6 | 1266.4 |
| 55° | 453.7 | 472.5 | 516.0 | 595.3 | 693.3 | 746.2 | 799.9 | 919.3 | 1043.8 | 1174.3 | 1307.4 |
| 57.5° | 408.5 | 431.5 | 479.3 | 568.8 | 672.9 | 730.9 | 790.6 | 921.0 | 1058.3 | 1200.8 | 1349.1 |
| 60° | 370.1 | 390.6 | 446.0 | 543.2 | 655.0 | 716.4 | 782.0 | 922.7 | 1073.7 | 1231.5 | 1397.8 |
| 62.5° | 329.2 | 351.4 | 417.0 | 518.5 | 637.0 | 703.6 | 773.5 | 925.3 | 1089.9 | 1263.0 | 1447.2 |
| 65° | 289.1 | 312.1 | 388.0 | 494.6 | 619.1 | 689.9 | 763.3 | 925.3 | 1102.7 | 1292.0 | 1489.9 |
| 67.5° | 250.7 | 275.5 | 359.0 | 469.0 | 598.7 | 672.9 | 750.5 | 921.0 | 1110.4 | 1312.5 | 1523.1 |
| 70° | 214.1 | 241.3 | 330.9 | 441.8 | 576.5 | 652.4 | 732.6 | 911.7 | 1109.5 | 1320.2 | 1537.6 |
| 72.5° | 177.4 | 208.9 | 300.2 | 414.5 | 552.6 | 629.4 | 711.2 | 893.7 | 1097.6 | 1310.8 | 1528.2 |
| 75° | 144.1 | 178.2 | 272.9 | 387.2 | 525.3 | 602.1 | 684.8 | 866.5 | 1071.1 | 1281.8 | 1492.4 |
| 77.5° | 113.4 | 150.9 | 243.9 | 357.3 | 494.6 | 570.5 | 651.5 | 831.5 | 1029.3 | 1230.6 | 1429.3 |
| 80° | 84.4 | 126.2 | 216.6 | 327.5 | 461.4 | 535.6 | 614.0 | 787.1 | 974.8 | 1161.5 | 1344.9 |
| 82.5° | 58.8 | 103.2 | 190.2 | 297.6 | 427.3 | 498.0 | 573.1 | 734.3 | 911.7 | 1081.4 | 1247.7 |
| 85° | 35.8 | 82.7 | 163.7 | 268.6 | 392.3 | 458.8 | 529.6 | 678.8 | 842.6 | 994.4 | 1141.1 |
| 87.5° | 15.4 | 64.0 | 140.7 | 240.5 | 357.3 | 420.4 | 485.2 | 626.0 | 769.2 | 904.0 | 1034.5 |
| 90° | 0.9 | 47.8 | 120.2 | 214.1 | 324.1 | 382.9 | 443.5 | 569.7 | 701.9 | 821.3 | 937.2 |
| 92.5° | 0.0 | 40.9 | 108.3 | 197.9 | 301.0 | 355.6 | 411.9 | 527.9 | 647.3 | 753.9 | 857.1 |
| 95° | 0.9 | 34.1 | 98.1 | 179.9 | 278.0 | 330.0 | 382.1 | 490.4 | 597.8 | 695.9 | 790.6 |
| 97.5° | 0.9 | 28.1 | 87.0 | 163.7 | 256.7 | 304.5 | 353.1 | 453.7 | 550.9 | 643.9 | 731.7 |
| 100° | 0.9 | 22.2 | 76.8 | 148.4 | 234.5 | 278.9 | 324.9 | 419.6 | 510.8 | 597.8 | 680.5 |
| 102.5° | 0.9 | 16.2 | 68.2 | 133.9 | 214.1 | 255.8 | 298.5 | 388.0 | 474.2 | 557.7 | 636.2 |
| 105° | 0.9 | 11.1 | 59.7 | 120.2 | 195.3 | 234.5 | 274.6 | 359.0 | 440.9 | 521.1 | 597.8 |
| 107.5° | 0.9 | 7.7 | 52.0 | 107.5 | 174.8 | 214.1 | 251.6 | 331.7 | 410.2 | 487.8 | 562.9 |
| 110° | 0.9 | 6.8 | 45.2 | 96.4 | 158.6 | 194.4 | 230.3 | 306.2 | 381.2 | 455.4 | 528.7 |



TEST NUMBER: P201250

CATALOG NUMBER: 4LBLED-LD4-9-SYMF-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|--------|-----|-----|------|------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 0.9 | 6.0 | 38.4 | 86.1 | 142.4 | 174.8 | 209.8 | 281.4 | 354.8 | 426.4 | 496.3 |
| 115° | 0.9 | 6.0 | 31.6 | 76.8 | 128.8 | 157.8 | 190.2 | 257.5 | 327.5 | 396.6 | 464.8 |
| 117.5° | 0.9 | 6.0 | 25.6 | 68.2 | 116.0 | 142.4 | 170.6 | 235.4 | 300.2 | 367.6 | 434.1 |
| 120° | 0.9 | 5.1 | 20.5 | 59.7 | 104.9 | 128.8 | 155.2 | 214.1 | 273.8 | 336.9 | 400.8 |
| 122.5° | 0.9 | 5.1 | 17.1 | 52.0 | 93.8 | 116.0 | 139.9 | 191.9 | 249.0 | 307.0 | 366.7 |
| 125° | 0.9 | 4.3 | 14.5 | 43.5 | 82.7 | 104.0 | 125.4 | 172.3 | 225.1 | 278.9 | 333.4 |
| 127.5° | 1.7 | 4.3 | 11.9 | 35.8 | 71.6 | 90.4 | 110.9 | 153.5 | 199.6 | 248.2 | 300.2 |
| 130° | 1.7 | 4.3 | 10.2 | 27.3 | 60.5 | 77.6 | 95.5 | 134.7 | 177.4 | 219.2 | 264.4 |
| 132.5° | 1.7 | 3.4 | 9.4 | 21.3 | 50.3 | 65.7 | 81.9 | 116.8 | 154.4 | 191.9 | 231.1 |
| 135° | 1.7 | 3.4 | 7.7 | 17.1 | 40.1 | 53.7 | 69.1 | 99.8 | 133.0 | 168.0 | 201.3 |
| 137.5° | 1.7 | 2.6 | 6.8 | 13.6 | 30.7 | 43.5 | 57.1 | 84.4 | 113.4 | 143.3 | 174.0 |
| 140° | 1.7 | 2.6 | 6.0 | 11.1 | 23.0 | 32.4 | 45.2 | 69.1 | 94.7 | 121.1 | 147.5 |
| 142.5° | 1.7 | 2.6 | 5.1 | 9.4 | 17.9 | 24.7 | 34.1 | 56.3 | 78.5 | 100.6 | 123.7 |
| 145° | 1.7 | 2.6 | 4.3 | 7.7 | 13.6 | 18.8 | 24.7 | 43.5 | 63.1 | 82.7 | 102.3 |
| 147.5° | 1.7 | 2.6 | 4.3 | 6.8 | 11.1 | 14.5 | 18.8 | 31.6 | 49.5 | 65.7 | 82.7 |
| 150° | 1.7 | 2.6 | 3.4 | 6.0 | 9.4 | 11.1 | 13.6 | 22.2 | 35.8 | 50.3 | 64.8 |
| 152.5° | 1.7 | 1.7 | 3.4 | 5.1 | 6.8 | 8.5 | 10.2 | 16.2 | 24.7 | 35.8 | 48.6 |
| 155° | 1.7 | 1.7 | 2.6 | 4.3 | 6.0 | 6.8 | 7.7 | 11.1 | 16.2 | 23.0 | 32.4 |
| 157.5° | 1.7 | 1.7 | 2.6 | 3.4 | 4.3 | 5.1 | 6.0 | 7.7 | 11.1 | 14.5 | 19.6 |
| 160° | 1.7 | 1.7 | 2.6 | 3.4 | 3.4 | 4.3 | 4.3 | 5.1 | 6.8 | 8.5 | 11.1 |
| 162.5° | 1.7 | 1.7 | 2.6 | 2.6 | 2.6 | 3.4 | 3.4 | 3.4 | 4.3 | 4.3 | 5.1 |
| 165° | 1.7 | 1.7 | 1.7 | 2.6 | 1.7 | 2.6 | 1.7 | 2.6 | 2.6 | 1.7 | 1.7 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P201250

CATALOG NUMBER: 4LBLELD4-9-SYMF-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° | 95° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 |
| 2.5° | 1180.3 | 1174.3 | 1171.8 | 1168.4 | 1165.8 | 1164.1 | 1161.5 | 1159.8 | 1157.3 | 1157.3 | 1158.1 |
| 5° | 1178.6 | 1172.6 | 1170.9 | 1167.5 | 1165.8 | 1164.9 | 1163.2 | 1164.1 | 1164.1 | 1164.9 | 1164.1 |
| 7.5° | 1175.2 | 1170.1 | 1168.4 | 1166.6 | 1164.9 | 1164.1 | 1163.2 | 1164.9 | 1164.9 | 1165.8 | 1165.8 |
| 10° | 1169.2 | 1165.8 | 1165.8 | 1164.1 | 1163.2 | 1162.4 | 1160.7 | 1163.2 | 1163.2 | 1164.9 | 1164.1 |
| 12.5° | 1162.4 | 1161.5 | 1162.4 | 1163.2 | 1163.2 | 1162.4 | 1161.5 | 1164.9 | 1166.6 | 1166.6 | 1167.5 |
| 15° | 1154.7 | 1156.4 | 1160.7 | 1163.2 | 1164.9 | 1164.9 | 1166.6 | 1170.1 | 1172.6 | 1173.5 | 1173.5 |
| 17.5° | 1148.7 | 1153.0 | 1160.7 | 1167.5 | 1170.9 | 1172.6 | 1176.9 | 1183.7 | 1188.0 | 1188.8 | 1188.8 |
| 20° | 1144.5 | 1154.7 | 1168.4 | 1181.1 | 1185.4 | 1188.8 | 1197.3 | 1205.9 | 1211.8 | 1212.7 | 1212.7 |
| 22.5° | 1147.9 | 1164.9 | 1183.7 | 1198.2 | 1204.2 | 1208.4 | 1217.8 | 1228.9 | 1235.7 | 1236.6 | 1236.6 |
| 25° | 1156.4 | 1176.9 | 1198.2 | 1216.1 | 1222.9 | 1228.0 | 1238.3 | 1250.2 | 1257.0 | 1259.6 | 1258.7 |
| 27.5° | 1164.1 | 1188.8 | 1213.6 | 1234.0 | 1241.7 | 1248.5 | 1261.3 | 1275.0 | 1283.5 | 1286.0 | 1284.3 |
| 30° | 1170.9 | 1199.9 | 1228.0 | 1252.8 | 1263.0 | 1270.7 | 1286.0 | 1302.2 | 1313.3 | 1315.9 | 1313.3 |
| 32.5° | 1177.7 | 1212.7 | 1246.0 | 1275.0 | 1285.2 | 1296.3 | 1315.9 | 1334.6 | 1345.7 | 1349.1 | 1347.4 |
| 35° | 1187.1 | 1228.0 | 1267.3 | 1300.5 | 1314.2 | 1327.0 | 1350.0 | 1372.2 | 1385.8 | 1388.4 | 1385.8 |
| 37.5° | 1199.9 | 1247.7 | 1291.2 | 1332.9 | 1347.4 | 1365.4 | 1392.6 | 1419.1 | 1435.3 | 1438.7 | 1435.3 |
| 40° | 1216.1 | 1272.4 | 1323.6 | 1372.2 | 1391.8 | 1410.5 | 1443.8 | 1475.4 | 1493.3 | 1499.2 | 1496.7 |
| 42.5° | 1237.4 | 1303.1 | 1362.8 | 1420.8 | 1443.0 | 1466.8 | 1506.1 | 1542.7 | 1563.2 | 1570.0 | 1563.2 |
| 45° | 1263.9 | 1341.5 | 1410.5 | 1477.9 | 1503.5 | 1532.5 | 1579.4 | 1621.2 | 1645.1 | 1651.0 | 1645.1 |
| 47.5° | 1298.8 | 1386.7 | 1466.8 | 1544.4 | 1575.1 | 1609.3 | 1664.7 | 1712.4 | 1738.0 | 1744.9 | 1738.9 |
| 50° | 1336.4 | 1441.3 | 1533.4 | 1622.0 | 1660.4 | 1696.2 | 1761.1 | 1813.9 | 1841.2 | 1854.0 | 1842.9 |
| 52.5° | 1383.3 | 1500.9 | 1609.3 | 1708.2 | 1754.2 | 1796.9 | 1868.5 | 1926.5 | 1959.8 | 1970.8 | 1955.5 |
| 55° | 1439.5 | 1572.6 | 1693.7 | 1808.0 | 1854.0 | 1901.8 | 1981.1 | 2042.5 | 2077.4 | 2089.4 | 2078.3 |
| 57.5° | 1501.8 | 1648.5 | 1782.4 | 1902.6 | 1956.3 | 2005.0 | 2093.7 | 2157.6 | 2188.3 | 2203.7 | 2190.0 |
| 60° | 1566.6 | 1726.9 | 1871.9 | 1999.8 | 2058.7 | 2109.0 | 2199.4 | 2262.5 | 2294.9 | 2310.3 | 2297.5 |
| 62.5° | 1629.7 | 1802.8 | 1955.5 | 2088.5 | 2144.8 | 2200.3 | 2290.7 | 2351.2 | 2384.5 | 2398.1 | 2386.2 |
| 65° | 1684.3 | 1866.8 | 2023.7 | 2161.0 | 2219.0 | 2273.6 | 2358.9 | 2416.9 | 2451.8 | 2461.2 | 2452.7 |
| 67.5° | 1725.2 | 1910.3 | 2068.9 | 2204.5 | 2260.8 | 2315.4 | 2396.4 | 2450.1 | 2484.2 | 2492.8 | 2485.1 |
| 70° | 1744.0 | 1927.4 | 2084.3 | 2216.5 | 2271.9 | 2320.5 | 2397.3 | 2448.4 | 2480.8 | 2485.9 | 2480.0 |
| 72.5° | 1732.1 | 1910.3 | 2062.1 | 2188.3 | 2241.2 | 2283.8 | 2354.6 | 2403.2 | 2433.9 | 2438.2 | 2433.9 |
| 75° | 1687.7 | 1858.3 | 2001.5 | 2119.2 | 2168.7 | 2204.5 | 2271.9 | 2317.1 | 2347.8 | 2351.2 | 2346.1 |
| 77.5° | 1612.7 | 1771.3 | 1902.6 | 2016.0 | 2057.0 | 2091.9 | 2155.9 | 2196.0 | 2220.7 | 2225.8 | 2219.9 |
| 80° | 1512.0 | 1657.9 | 1775.6 | 1877.0 | 1916.3 | 1946.1 | 2008.4 | 2051.9 | 2065.5 | 2072.3 | 2063.8 |
| 82.5° | 1396.9 | 1527.4 | 1632.3 | 1724.4 | 1759.3 | 1796.0 | 1836.1 | 1876.2 | 1895.8 | 1901.8 | 1894.9 |
| 85° | 1273.2 | 1389.2 | 1482.2 | 1564.9 | 1595.6 | 1628.9 | 1663.8 | 1703.1 | 1720.1 | 1726.1 | 1719.3 |
| 87.5° | 1149.6 | 1251.9 | 1333.8 | 1407.1 | 1435.3 | 1465.1 | 1506.9 | 1527.4 | 1550.4 | 1557.2 | 1549.6 |
| 90° | 1038.7 | 1130.8 | 1204.2 | 1270.7 | 1297.1 | 1324.4 | 1356.8 | 1382.4 | 1403.7 | 1409.7 | 1402.9 |
| 92.5° | 949.2 | 1031.9 | 1099.3 | 1159.0 | 1182.0 | 1207.6 | 1239.1 | 1263.9 | 1282.6 | 1288.6 | 1281.8 |
| 95° | 875.0 | 950.9 | 1014.0 | 1069.4 | 1091.6 | 1115.5 | 1150.4 | 1170.1 | 1187.1 | 1192.2 | 1187.1 |
| 97.5° | 811.9 | 883.5 | 943.2 | 996.9 | 1018.3 | 1040.4 | 1074.5 | 1094.2 | 1110.4 | 1114.6 | 1110.4 |
| 100° | 756.4 | 826.4 | 885.2 | 936.4 | 957.7 | 979.0 | 1012.3 | 1031.9 | 1047.3 | 1052.4 | 1047.3 |
| 102.5° | 710.4 | 777.8 | 835.8 | 887.8 | 908.2 | 929.6 | 961.1 | 984.1 | 996.1 | 1002.1 | 996.9 |
| 105° | 670.3 | 736.0 | 794.0 | 845.1 | 866.5 | 886.9 | 919.3 | 940.7 | 954.3 | 961.1 | 955.1 |
| 107.5° | 633.6 | 698.5 | 757.3 | 806.8 | 828.1 | 848.5 | 881.8 | 903.1 | 915.9 | 923.6 | 916.8 |
| 110° | 598.7 | 662.6 | 718.9 | 770.1 | 791.4 | 812.7 | 846.0 | 867.3 | 880.1 | 886.9 | 881.0 |



TEST NUMBER: P201250

CATALOG NUMBER: 4LBLED-LD4-9-SYMF-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° | 95° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 564.6 | 626.8 | 684.8 | 734.3 | 754.7 | 776.1 | 810.2 | 832.3 | 844.3 | 852.0 | 845.1 |
| 115° | 530.4 | 591.9 | 648.1 | 695.9 | 716.4 | 738.5 | 771.8 | 794.8 | 807.6 | 813.6 | 806.8 |
| 117.5° | 497.2 | 556.0 | 609.8 | 656.7 | 677.1 | 698.5 | 730.9 | 753.9 | 767.5 | 773.5 | 766.7 |
| 120° | 463.1 | 519.4 | 572.2 | 614.9 | 636.2 | 655.8 | 689.1 | 711.2 | 724.9 | 730.9 | 724.0 |
| 122.5° | 426.4 | 481.8 | 532.2 | 573.9 | 594.4 | 613.2 | 645.6 | 667.8 | 680.5 | 686.5 | 680.5 |
| 125° | 388.9 | 440.9 | 489.5 | 531.3 | 548.4 | 566.3 | 597.8 | 619.1 | 632.8 | 637.9 | 632.8 |
| 127.5° | 351.4 | 399.1 | 444.3 | 481.0 | 499.7 | 516.8 | 546.7 | 567.1 | 579.1 | 585.0 | 580.8 |
| 130° | 313.8 | 359.0 | 400.0 | 433.2 | 449.4 | 465.6 | 492.9 | 511.7 | 523.6 | 528.7 | 524.5 |
| 132.5° | 273.8 | 317.2 | 357.3 | 386.3 | 401.7 | 415.3 | 440.1 | 456.3 | 466.5 | 472.5 | 467.3 |
| 135° | 237.9 | 273.8 | 311.3 | 341.1 | 356.5 | 368.4 | 390.6 | 404.2 | 413.6 | 418.7 | 413.6 |
| 137.5° | 205.5 | 236.2 | 266.9 | 293.4 | 307.9 | 320.7 | 342.0 | 354.8 | 363.3 | 368.4 | 363.3 |
| 140° | 175.7 | 202.1 | 229.4 | 250.7 | 263.5 | 273.8 | 293.4 | 304.5 | 312.1 | 316.4 | 311.3 |
| 142.5° | 146.7 | 170.6 | 193.6 | 213.2 | 224.3 | 232.8 | 251.6 | 260.1 | 266.1 | 268.6 | 266.1 |
| 145° | 122.0 | 141.6 | 161.2 | 179.1 | 187.6 | 194.4 | 213.2 | 222.6 | 227.7 | 230.3 | 227.7 |
| 147.5° | 98.9 | 115.1 | 131.3 | 145.8 | 153.5 | 162.0 | 174.8 | 185.9 | 190.2 | 191.9 | 190.2 |
| 150° | 77.6 | 92.1 | 104.9 | 116.8 | 122.8 | 128.8 | 139.9 | 150.9 | 155.2 | 157.8 | 155.2 |
| 152.5° | 58.8 | 70.8 | 81.0 | 90.4 | 95.5 | 100.6 | 110.0 | 120.2 | 124.5 | 126.2 | 124.5 |
| 155° | 42.6 | 51.2 | 60.5 | 67.4 | 71.6 | 75.0 | 81.9 | 88.7 | 95.5 | 95.5 | 95.5 |
| 157.5° | 26.4 | 33.3 | 40.9 | 46.9 | 49.5 | 52.9 | 58.0 | 64.0 | 69.1 | 71.6 | 71.6 |
| 160° | 13.6 | 17.9 | 23.0 | 27.3 | 29.8 | 32.4 | 35.8 | 40.9 | 44.3 | 46.9 | 45.2 |
| 162.5° | 6.0 | 7.7 | 10.2 | 11.9 | 13.6 | 14.5 | 17.1 | 19.6 | 21.3 | 25.6 | 22.2 |
| 165° | 1.7 | 1.7 | 2.6 | 3.4 | 3.4 | 3.4 | 4.3 | 5.1 | 6.0 | 9.4 | 6.8 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P201250

CATALOG NUMBER: 4LBLEDD4-9-SYMF-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

| | 100° | 105° | 110° | 112.5° | 115° | 120° | 125° | 130° | 135° | 140° | 145° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 |
| 2.5° | 1159.8 | 1162.4 | 1165.8 | 1167.5 | 1170.1 | 1171.8 | 1176.0 | 1181.1 | 1176.9 | 1170.9 | 1171.8 |
| 5° | 1164.1 | 1163.2 | 1165.8 | 1167.5 | 1169.2 | 1170.1 | 1174.3 | 1179.4 | 1174.3 | 1168.4 | 1168.4 |
| 7.5° | 1165.8 | 1164.9 | 1165.8 | 1166.6 | 1167.5 | 1167.5 | 1171.8 | 1176.0 | 1170.9 | 1163.2 | 1161.5 |
| 10° | 1163.2 | 1162.4 | 1163.2 | 1164.9 | 1164.9 | 1164.9 | 1167.5 | 1170.9 | 1164.9 | 1155.6 | 1152.1 |
| 12.5° | 1164.9 | 1162.4 | 1162.4 | 1163.2 | 1163.2 | 1161.5 | 1162.4 | 1164.9 | 1157.3 | 1147.0 | 1141.9 |
| 15° | 1170.9 | 1166.6 | 1164.9 | 1164.9 | 1163.2 | 1159.0 | 1157.3 | 1157.3 | 1148.7 | 1135.1 | 1128.3 |
| 17.5° | 1185.4 | 1178.6 | 1173.5 | 1170.9 | 1167.5 | 1159.8 | 1153.9 | 1150.4 | 1139.4 | 1124.0 | 1112.9 |
| 20° | 1207.6 | 1198.2 | 1190.5 | 1185.4 | 1181.1 | 1167.5 | 1155.6 | 1146.2 | 1130.8 | 1112.1 | 1097.6 |
| 22.5° | 1229.8 | 1219.5 | 1208.4 | 1203.3 | 1197.3 | 1182.0 | 1165.8 | 1149.6 | 1126.6 | 1101.0 | 1081.4 |
| 25° | 1251.1 | 1240.8 | 1228.0 | 1222.9 | 1215.3 | 1197.3 | 1176.9 | 1158.1 | 1128.3 | 1093.3 | 1065.2 |
| 27.5° | 1275.8 | 1263.0 | 1249.4 | 1241.7 | 1233.2 | 1212.7 | 1189.7 | 1166.6 | 1133.4 | 1093.3 | 1054.1 |
| 30° | 1303.9 | 1288.6 | 1270.7 | 1262.2 | 1251.9 | 1228.0 | 1199.9 | 1172.6 | 1136.8 | 1093.3 | 1048.1 |
| 32.5° | 1336.4 | 1318.4 | 1297.1 | 1285.2 | 1273.2 | 1245.1 | 1211.8 | 1180.3 | 1139.4 | 1092.5 | 1043.0 |
| 35° | 1373.9 | 1353.4 | 1327.8 | 1314.2 | 1299.7 | 1266.4 | 1227.2 | 1188.8 | 1143.6 | 1091.6 | 1036.2 |
| 37.5° | 1420.8 | 1396.9 | 1366.2 | 1349.1 | 1332.1 | 1292.9 | 1247.7 | 1201.6 | 1150.4 | 1092.5 | 1031.0 |
| 40° | 1477.1 | 1448.9 | 1413.1 | 1391.8 | 1371.3 | 1326.1 | 1272.4 | 1217.8 | 1159.8 | 1094.2 | 1025.9 |
| 42.5° | 1543.6 | 1509.5 | 1469.4 | 1444.7 | 1420.8 | 1364.5 | 1303.1 | 1238.3 | 1172.6 | 1097.6 | 1023.4 |
| 45° | 1622.9 | 1587.1 | 1535.9 | 1505.2 | 1478.8 | 1413.1 | 1342.3 | 1265.6 | 1191.4 | 1106.1 | 1022.5 |
| 47.5° | 1714.2 | 1669.0 | 1613.5 | 1577.7 | 1546.1 | 1470.2 | 1388.4 | 1299.7 | 1212.7 | 1117.2 | 1024.2 |
| 50° | 1816.5 | 1765.3 | 1701.4 | 1663.8 | 1624.6 | 1537.6 | 1443.0 | 1339.8 | 1240.0 | 1133.4 | 1028.5 |
| 52.5° | 1929.1 | 1872.8 | 1803.7 | 1759.3 | 1715.9 | 1615.2 | 1504.4 | 1390.9 | 1271.5 | 1153.9 | 1036.2 |
| 55° | 2045.9 | 1985.3 | 1908.6 | 1860.0 | 1811.4 | 1700.5 | 1576.8 | 1446.4 | 1313.3 | 1179.4 | 1049.0 |
| 57.5° | 2159.3 | 2097.1 | 2012.6 | 1963.2 | 1908.6 | 1790.9 | 1654.5 | 1506.9 | 1358.5 | 1209.3 | 1063.5 |
| 60° | 2264.2 | 2202.0 | 2116.7 | 2066.4 | 2006.7 | 1880.4 | 1733.8 | 1573.4 | 1405.4 | 1240.8 | 1080.5 |
| 62.5° | 2352.9 | 2293.2 | 2207.9 | 2156.8 | 2095.4 | 1964.9 | 1809.7 | 1638.2 | 1456.6 | 1274.1 | 1096.7 |
| 65° | 2418.6 | 2362.3 | 2279.6 | 2226.7 | 2167.8 | 2032.2 | 1873.6 | 1695.4 | 1499.2 | 1303.1 | 1111.2 |
| 67.5° | 2451.8 | 2399.0 | 2318.8 | 2268.5 | 2210.5 | 2075.7 | 1917.1 | 1733.8 | 1531.6 | 1323.6 | 1120.6 |
| 70° | 2448.4 | 2398.1 | 2323.1 | 2273.6 | 2218.2 | 2088.5 | 1932.5 | 1749.1 | 1546.1 | 1331.2 | 1118.9 |
| 72.5° | 2404.1 | 2353.8 | 2286.4 | 2238.6 | 2185.8 | 2064.7 | 1911.1 | 1735.5 | 1535.1 | 1319.3 | 1105.2 |
| 75° | 2316.2 | 2270.2 | 2202.0 | 2162.7 | 2115.0 | 2002.4 | 1855.7 | 1685.2 | 1497.5 | 1287.7 | 1077.1 |
| 77.5° | 2190.0 | 2155.1 | 2088.5 | 2051.9 | 2005.0 | 1900.9 | 1762.8 | 1609.3 | 1431.9 | 1234.9 | 1033.6 |
| 80° | 2035.7 | 2006.7 | 1941.9 | 1909.4 | 1863.4 | 1773.0 | 1653.6 | 1505.2 | 1344.9 | 1163.2 | 977.3 |
| 82.5° | 1866.8 | 1833.5 | 1782.4 | 1752.5 | 1709.0 | 1628.0 | 1514.6 | 1393.5 | 1244.3 | 1081.4 | 911.7 |
| 85° | 1692.0 | 1661.3 | 1614.4 | 1588.8 | 1550.4 | 1477.9 | 1376.4 | 1269.8 | 1137.6 | 991.0 | 840.9 |
| 87.5° | 1525.7 | 1495.8 | 1451.5 | 1428.5 | 1393.5 | 1328.7 | 1240.0 | 1146.2 | 1029.3 | 904.0 | 765.8 |
| 90° | 1381.6 | 1353.4 | 1311.6 | 1290.3 | 1258.7 | 1199.9 | 1119.7 | 1035.3 | 932.1 | 817.0 | 698.5 |
| 92.5° | 1263.0 | 1237.4 | 1198.2 | 1177.7 | 1149.6 | 1095.9 | 1023.4 | 946.6 | 853.7 | 753.9 | 643.9 |
| 95° | 1169.2 | 1144.5 | 1109.5 | 1089.9 | 1063.5 | 1008.0 | 944.1 | 872.4 | 787.1 | 695.9 | 594.4 |
| 97.5° | 1093.3 | 1072.8 | 1034.5 | 1015.7 | 994.4 | 938.1 | 880.1 | 809.3 | 730.0 | 644.7 | 550.1 |
| 100° | 1031.9 | 1008.9 | 973.9 | 956.0 | 933.8 | 881.0 | 822.1 | 755.6 | 678.8 | 597.8 | 510.0 |
| 102.5° | 984.1 | 960.3 | 927.9 | 907.4 | 886.1 | 832.3 | 774.4 | 709.5 | 636.2 | 557.7 | 473.3 |
| 105° | 941.5 | 918.5 | 886.1 | 865.6 | 844.3 | 791.4 | 736.0 | 670.3 | 597.8 | 521.9 | 440.1 |
| 107.5° | 901.4 | 881.0 | 848.5 | 828.1 | 806.8 | 753.9 | 698.5 | 633.6 | 562.9 | 488.7 | 409.3 |
| 110° | 867.3 | 845.1 | 811.0 | 791.4 | 768.4 | 718.1 | 662.6 | 599.5 | 528.7 | 456.3 | 380.4 |



TEST NUMBER: P201250

CATALOG NUMBER: 4LBLED-LD4-9-SYMF-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

| | 100° | 105° | 110° | 112.5° | 115° | 120° | 125° | 130° | 135° | 140° | 145° |
|--------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 833.2 | 809.3 | 775.2 | 755.6 | 732.6 | 682.2 | 627.7 | 565.4 | 496.3 | 426.4 | 353.1 |
| 115° | 795.7 | 772.6 | 736.8 | 717.2 | 694.2 | 644.7 | 591.9 | 531.3 | 464.8 | 396.6 | 325.8 |
| 117.5° | 755.6 | 732.6 | 696.7 | 678.0 | 655.8 | 607.2 | 556.9 | 498.0 | 433.2 | 367.6 | 298.5 |
| 120° | 712.1 | 689.9 | 655.8 | 637.0 | 615.7 | 568.8 | 520.2 | 461.4 | 400.0 | 336.9 | 272.9 |
| 122.5° | 667.8 | 646.4 | 613.2 | 594.4 | 573.9 | 529.6 | 481.8 | 424.7 | 365.9 | 307.0 | 248.2 |
| 125° | 620.0 | 598.7 | 567.1 | 549.2 | 528.7 | 486.1 | 440.1 | 386.3 | 331.7 | 278.9 | 222.6 |
| 127.5° | 564.6 | 547.5 | 516.8 | 498.9 | 480.1 | 442.6 | 398.3 | 349.7 | 299.3 | 248.2 | 197.9 |
| 130° | 511.7 | 493.8 | 464.8 | 448.6 | 432.4 | 398.3 | 359.0 | 312.1 | 262.7 | 218.3 | 173.1 |
| 132.5° | 456.3 | 440.1 | 415.3 | 401.7 | 387.2 | 356.5 | 316.4 | 270.3 | 228.6 | 190.2 | 150.1 |
| 135° | 404.2 | 390.6 | 368.4 | 356.5 | 342.0 | 309.6 | 272.0 | 233.7 | 198.7 | 164.6 | 128.8 |
| 137.5° | 355.6 | 342.0 | 321.5 | 308.7 | 293.4 | 264.4 | 233.7 | 202.1 | 169.7 | 140.7 | 109.2 |
| 140° | 304.5 | 293.4 | 274.6 | 263.5 | 249.9 | 225.1 | 199.6 | 169.7 | 144.1 | 117.7 | 90.4 |
| 142.5° | 261.0 | 251.6 | 232.8 | 222.6 | 210.6 | 190.2 | 166.3 | 143.3 | 120.2 | 97.2 | 74.2 |
| 145° | 223.4 | 214.1 | 193.6 | 185.9 | 174.8 | 156.9 | 137.3 | 116.8 | 98.1 | 78.5 | 59.7 |
| 147.5° | 186.8 | 175.7 | 157.8 | 150.9 | 142.4 | 127.1 | 111.7 | 95.5 | 79.3 | 62.3 | 46.1 |
| 150° | 152.7 | 139.9 | 125.4 | 121.1 | 112.6 | 100.6 | 87.8 | 74.2 | 61.4 | 47.8 | 33.3 |
| 152.5° | 120.2 | 109.2 | 97.2 | 93.0 | 86.1 | 78.5 | 67.4 | 56.3 | 46.1 | 33.3 | 23.0 |
| 155° | 89.5 | 81.0 | 71.6 | 69.1 | 64.0 | 58.0 | 48.6 | 40.1 | 30.7 | 22.2 | 16.2 |
| 157.5° | 63.1 | 56.3 | 49.5 | 47.8 | 44.3 | 39.2 | 31.6 | 24.7 | 19.6 | 14.5 | 11.1 |
| 160° | 39.2 | 35.0 | 29.8 | 28.1 | 25.6 | 22.2 | 17.1 | 14.5 | 11.9 | 9.4 | 6.8 |
| 162.5° | 18.8 | 16.2 | 14.5 | 13.6 | 11.9 | 10.2 | 9.4 | 7.7 | 6.8 | 6.0 | 5.1 |
| 165° | 6.8 | 6.8 | 6.8 | 6.0 | 6.0 | 6.0 | 6.0 | 5.1 | 4.3 | 4.3 | 3.4 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P201250

CATALOG NUMBER: 4LBLED-LD4-9-SYMF-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

| | 150° | 155° | 157.5° | 160° | 165° | 170° | 175° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 | 1173.5 |
| 2.5° | 1172.6 | 1174.3 | 1174.3 | 1175.2 | 1177.7 | 1182.8 | 1189.7 | 1190.5 |
| 5° | 1169.2 | 1170.1 | 1170.1 | 1170.1 | 1172.6 | 1176.9 | 1183.7 | 1184.6 |
| 7.5° | 1161.5 | 1161.5 | 1161.5 | 1161.5 | 1164.1 | 1167.5 | 1173.5 | 1174.3 |
| 10° | 1151.3 | 1150.4 | 1150.4 | 1149.6 | 1151.3 | 1153.9 | 1160.7 | 1159.8 |
| 12.5° | 1138.5 | 1136.8 | 1135.9 | 1135.9 | 1135.1 | 1137.6 | 1141.9 | 1142.8 |
| 15° | 1124.0 | 1120.6 | 1118.9 | 1117.2 | 1116.3 | 1116.3 | 1121.4 | 1120.6 |
| 17.5° | 1106.9 | 1101.8 | 1099.3 | 1096.7 | 1093.3 | 1093.3 | 1096.7 | 1095.9 |
| 20° | 1087.3 | 1080.5 | 1076.2 | 1072.8 | 1067.7 | 1066.0 | 1067.7 | 1066.9 |
| 22.5° | 1067.7 | 1056.6 | 1052.4 | 1047.3 | 1039.6 | 1036.2 | 1035.3 | 1034.5 |
| 25° | 1044.7 | 1031.0 | 1025.1 | 1020.0 | 1008.9 | 1004.6 | 1000.3 | 998.6 |
| 27.5° | 1024.2 | 1004.6 | 996.9 | 988.4 | 975.6 | 969.6 | 962.8 | 961.1 |
| 30° | 1006.3 | 977.3 | 965.4 | 956.9 | 940.7 | 931.3 | 922.7 | 921.0 |
| 32.5° | 992.7 | 952.6 | 936.4 | 926.2 | 904.0 | 891.2 | 880.1 | 875.0 |
| 35° | 980.7 | 929.6 | 908.2 | 892.0 | 865.6 | 850.3 | 834.9 | 830.6 |
| 37.5° | 969.6 | 909.9 | 881.8 | 859.6 | 829.8 | 807.6 | 790.6 | 783.7 |
| 40° | 958.6 | 892.0 | 857.9 | 829.8 | 790.6 | 765.0 | 743.7 | 735.1 |
| 42.5° | 948.3 | 874.1 | 837.5 | 803.3 | 752.2 | 721.5 | 698.5 | 686.5 |
| 45° | 938.9 | 857.9 | 817.8 | 780.3 | 714.7 | 678.8 | 650.7 | 639.6 |
| 47.5° | 932.1 | 842.6 | 798.2 | 757.3 | 679.7 | 635.3 | 606.3 | 591.9 |
| 50° | 927.0 | 828.1 | 779.5 | 734.3 | 649.0 | 593.6 | 561.1 | 544.1 |
| 52.5° | 924.4 | 815.3 | 762.4 | 713.8 | 620.8 | 553.5 | 515.1 | 502.3 |
| 55° | 925.3 | 805.1 | 747.9 | 695.0 | 594.4 | 515.1 | 472.5 | 452.8 |
| 57.5° | 927.0 | 795.7 | 733.4 | 676.3 | 568.0 | 477.6 | 429.8 | 409.3 |
| 60° | 930.4 | 788.0 | 720.6 | 658.4 | 543.2 | 445.2 | 390.6 | 371.0 |
| 62.5° | 933.8 | 781.2 | 707.8 | 641.3 | 519.4 | 415.3 | 351.4 | 329.2 |
| 65° | 934.7 | 770.9 | 694.2 | 624.3 | 495.5 | 385.5 | 311.3 | 290.0 |
| 67.5° | 931.3 | 758.1 | 677.1 | 604.6 | 470.8 | 356.5 | 273.8 | 251.6 |
| 70° | 921.0 | 741.1 | 657.5 | 582.5 | 443.5 | 328.3 | 237.9 | 214.1 |
| 72.5° | 902.3 | 718.9 | 634.5 | 557.7 | 417.0 | 298.5 | 205.5 | 176.5 |
| 75° | 875.8 | 691.6 | 607.2 | 529.6 | 388.9 | 270.3 | 175.7 | 143.3 |
| 77.5° | 840.0 | 656.7 | 574.8 | 498.0 | 358.2 | 241.3 | 150.1 | 112.6 |
| 80° | 794.0 | 620.0 | 539.0 | 463.9 | 328.3 | 214.9 | 125.4 | 83.6 |
| 82.5° | 739.4 | 578.2 | 500.6 | 429.0 | 300.2 | 187.6 | 102.3 | 58.0 |
| 85° | 683.1 | 533.0 | 460.5 | 392.3 | 270.3 | 162.0 | 82.7 | 34.1 |
| 87.5° | 627.7 | 487.8 | 422.1 | 359.0 | 239.6 | 139.0 | 64.0 | 13.6 |
| 90° | 573.1 | 444.3 | 382.1 | 323.2 | 213.2 | 117.7 | 47.8 | 0.0 |
| 92.5° | 527.9 | 411.9 | 355.6 | 299.3 | 196.1 | 106.6 | 40.9 | 0.0 |
| 95° | 487.8 | 381.2 | 327.5 | 275.5 | 178.2 | 96.4 | 34.1 | 0.0 |
| 97.5° | 451.1 | 352.2 | 302.7 | 253.3 | 162.0 | 85.3 | 28.1 | 0.0 |
| 100° | 416.2 | 323.2 | 277.2 | 232.8 | 146.7 | 75.9 | 21.3 | 0.0 |
| 102.5° | 385.5 | 297.6 | 254.1 | 210.6 | 131.3 | 66.5 | 15.4 | 0.0 |
| 105° | 355.6 | 272.9 | 232.8 | 191.0 | 117.7 | 58.0 | 9.4 | 0.0 |
| 107.5° | 329.2 | 249.9 | 211.5 | 173.1 | 104.9 | 50.3 | 6.0 | 0.0 |
| 110° | 303.6 | 228.6 | 191.0 | 156.1 | 93.8 | 43.5 | 5.1 | 0.0 |



TEST NUMBER: P201250

CATALOG NUMBER: 4LBLED-LD4-9-SYMF-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

| | 150° | 155° | 157.5° | 160° | 165° | 170° | 175° | 180° |
|--------|-------|-------|--------|-------|------|------|------|------|
| 112.5° | 279.7 | 208.1 | 173.1 | 139.9 | 84.4 | 36.7 | 5.1 | 0.0 |
| 115° | 255.0 | 188.5 | 156.1 | 126.2 | 75.0 | 29.8 | 4.3 | 0.0 |
| 117.5° | 233.7 | 169.7 | 140.7 | 115.1 | 65.7 | 23.9 | 4.3 | 0.0 |
| 120° | 212.3 | 153.5 | 127.9 | 103.2 | 57.1 | 17.9 | 4.3 | 0.0 |
| 122.5° | 191.0 | 139.0 | 114.3 | 92.1 | 49.5 | 14.5 | 3.4 | 0.0 |
| 125° | 171.4 | 123.7 | 101.5 | 80.2 | 40.9 | 12.8 | 3.4 | 0.0 |
| 127.5° | 151.8 | 108.3 | 87.8 | 69.1 | 32.4 | 11.1 | 2.6 | 0.0 |
| 130° | 132.2 | 93.0 | 75.0 | 58.0 | 24.7 | 9.4 | 2.6 | 0.0 |
| 132.5° | 114.3 | 78.5 | 63.1 | 47.8 | 19.6 | 7.7 | 1.7 | 0.0 |
| 135° | 96.4 | 65.7 | 52.0 | 37.5 | 15.4 | 6.8 | 1.7 | 0.0 |
| 137.5° | 81.0 | 53.7 | 40.9 | 28.1 | 12.8 | 5.1 | 1.7 | 0.0 |
| 140° | 66.5 | 42.6 | 30.7 | 21.3 | 10.2 | 4.3 | 0.9 | 0.0 |
| 142.5° | 52.9 | 31.6 | 23.0 | 16.2 | 8.5 | 3.4 | 0.9 | 0.0 |
| 145° | 40.9 | 23.0 | 17.1 | 12.8 | 7.7 | 2.6 | 0.9 | 0.0 |
| 147.5° | 29.8 | 17.9 | 13.6 | 11.1 | 6.0 | 2.6 | 0.9 | 0.0 |
| 150° | 21.3 | 13.6 | 11.1 | 8.5 | 4.3 | 1.7 | 0.9 | 0.0 |
| 152.5° | 16.2 | 10.2 | 8.5 | 6.8 | 3.4 | 1.7 | 0.9 | 0.0 |
| 155° | 11.9 | 7.7 | 6.8 | 5.1 | 2.6 | 1.7 | 0.9 | 0.0 |
| 157.5° | 8.5 | 6.0 | 5.1 | 3.4 | 2.6 | 1.7 | 0.9 | 0.0 |
| 160° | 5.1 | 4.3 | 3.4 | 2.6 | 1.7 | 0.9 | 0.9 | 0.0 |
| 162.5° | 4.3 | 2.6 | 2.6 | 2.6 | 1.7 | 0.9 | 0.9 | 0.0 |
| 165° | 2.6 | 1.7 | 1.7 | 1.7 | 0.9 | 0.9 | 0.9 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)